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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,922	09/23/2004	Magalie Haguet	2002P04668WOUS	7999

7590 07/26/2006
Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
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EXAMINER

WILLIAMS JR, RONALD E

ART UNIT PAPER NUMBER

2121

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/508,922	HAGUET ET AL.	
	Examiner	Art Unit	
	Ronald E. Williams	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on September 23 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to application filed on September 23, 2004.
2. Claims 1-18 have been examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Saito et al.

(USPN: 4,903,192) hereinafter referred to as Saito.

Regarding Claim 9, Saito discloses:

A method for controlling a component of a technical plant by a PI controller that has control parameters including a control ratio and an integral-action time, comprising: defining the integral-action time; *(see col 7, lines 6-7)*

defining an initial value of the control ratio; *(see col 6, lines 34-37. Examiner notes the damping ratio to be the control ratio claimed by applicant)*

defining a set value of a control quantity of the component; *(see col 6, lines 14-17)*

determining the actual value of a controlled variable during operation of the technical plant; *(see col 6, lines 15-17. Examiner notes the manipulated variable, MV, to be the actual value of a controlled variable during operation as claimed by applicant)*

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changing the control ratio relative to a time response of the actual value until the actual value of the control variable remains within a tolerance band relative to the set value during operation of the technical plant; *(see col 6, lines 39-45)*

and reducing the control ratio if the time response of the actual value has a dwell time during which the actual value has a value within the tolerance band that is smaller than a first defined time period during operation of the technical plant. *(see col 6, lines 39-45)*

Regarding Claim 10, Saito discloses:

The method in accordance with claim 9, wherein the integral-action time is determined from the system time constants. *(see col 7, lines 34-44)*

Regarding Claim 11, Saito discloses:

The method in accordance with claim 9, wherein the integral-action time is determined from the sum of the system time constants of the component to be controlled. *(see col 7, lines 34-44)*

Regarding Claim 12, Saito discloses:

The method in accordance with claim 9, wherein the control ratio is reduced if a first change rate of the actual value is greater than a second change rate of the set value. *(see col 6, lines 39-45)*

Regarding Claim 13, Saito discloses:

The method in accordance with claim 9, wherein the control ratio is increased if the time

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response of the actual value has a rise time that includes the period from the start of a change of the set value until reaching an instantaneous value of the actual value within the tolerance band that is greater than a second defined time period. *(see col 13, lines 62-67)*

Regarding Claim 14, Saito discloses:

A PI controller for controlling a component of a technical plant, comprising:

a logic element having a control ratio *(see col 6, lines 34-37. Examiner notes that the damping ratio is the control ratio claimed by applicant)* and an integral-action time *(see col 7, lines 6-7)*;

a first controller input adapted to provide the controller can be supplied with a defined value for the integral-action time; *(see col 7, lines 6-7)*

a second controller input adapted so the controller can be supplied with the control ratio; *(see col 6, lines 34-37. Examiner notes that the damping ratio is the control ratio claimed by applicant)*

a third controller input adapted so the controller can be supplied with a set value of a control quantity of the component; *(see col 6, lines 14-17)* and

an adaption device that constantly applies the actual value of a control variable during the operation of the technical plant so the adaption device and the control ratio can be constantly changed relative to the time response of the actual value until the actual value of the control variable remains within a tolerance band relative to the set value with the control ratio being reduced by the adaption unit if the time response of the actual value has a dwell time during which the actual value accepts a value within the tolerance band that is smaller than a first defined time period. *(see col 6, lines 39-45. Examiner notes that control decider is the adaption*

device claimed by applicant)

Regarding Claim 15, Saito discloses:

The feedback controller in accordance with claim 14, wherein the integral-action time is determined from system time constants. *(see col 7, lines 39-45)*

Regarding Claim 16, Saito discloses:

The feedback controller in accordance with claim 14, wherein the integral-action time is determined from the sum of the system time constants of the component to be controlled. *(see col 7, lines 39-45)*

Regarding Claim 17, Saito discloses:

The feedback controller in accordance with claim 14, wherein the control ratio is reduced by the adaption unit if additionally a first change rate of the actual value is greater than a second change rate of the set value. *(see col 6, lines 39-45)*

Regarding Claim 18, Saito discloses:

The feedback controller in accordance with claim 14, wherein the control ratio is increased by the adaption unit if the time response of the actual value has a rise time that includes the time period from the start of a change of the set value until achievement of an instantaneous value of

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the actual value within the tolerance band, that is greater than a second defined time period. (*see col 13, lines 62-67*)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald E. Williams whose telephone number is 571 272 2590. The examiner can normally be reached on MWF 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571 272 3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Knight
Supervising Patent Examiner
Tech Center 2100

RW